MASTER VIEW
USB
KVM SWITCH

USER MANUAL

CS-1708
CS-1716

2004-04-27

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Subpart J of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

FC CE

2004-04-27

Packing List

The complete Master View CS-1708 / CS-1716 package consists of:

- 1 CS-1708 or CS-1716 KVM Switch
- 2 CS Custom 2-in-1 KVM Cables (1.8m)
- 1 Firmware Upgrade Cable
- 1 Power Adapter
- 1 Rack Mount Kit
- 1 User Manual
- 1 Quick Start Guide

Check to make sure that all the components are present and that nothing was damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices that connect to it.

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Conventions

This manual uses the following conventions:

`Courier`	Indicates text that you should key in.
[ ]	Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be *chorded*, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1.	Numbered lists represent procedures with sequential steps.
◆	Bullet lists provide information, but do not involve sequential steps.
→	Indicates movement through a series. For example, Start → Run means to open the *Start* menu, and then select *Run*.
⚠	Indicates critical information.

Chapter 1.
Introduction

Overview

The Master View CS-1708 and CS-1716 KVM Switches are control units that allow access to multiple computers from a single console (keyboard, mouse, and monitor). A single Master View can control up to eight (CS-1708) or 16 (CS-1716) computers.

As many as 31 additional switches can be added in a daisy chain configuration, allowing up to 512 computers to be controlled from a single keyboard-monitor-mouse console. A seven segment front panel LED displays each Station's position for easy identification. An auto-sensing function recognizes the position of each station (switch) on the chain, eliminating the need to manually set the position with DIP switches.

The CS-1708 and CS-1716 improve on previous models by providing USB ports for the console Keyboard and Mouse, and by transferring keyboard and mouse data to the computers via the faster, more reliable USB bus rather than the traditional PS/2 connection and in providing Multimedia keyboard support.

The CS-1708 and CS-1716 also utilize a custom ASIC (patent pending) for increased reliability and enhanced performance. By incorporating high density 15 pin CPU port connectors instead of the usual 25 pin connectors, a full, 16 port switch can be installed in a 1U system rack.

An included *Firmware Upgrade Utility* allows you can stay current with new improvements in switch functionality by downloading the latest firmware files from our website and using the utility to quickly and conveniently perform the upgrade.

Setup is fast and easy; simply plug cables into their appropriate ports. There is no software to configure, no installation routines, and no incompatibility problems. Since the CS-1708 / CS-1716 intercepts keyboard input directly, it works on multiple operating platforms (PC compatible, Mac, Sun).

Access to any computer on the installation is easily accomplished either by entering *Hotkey* combinations from the keyboard, or by means of a powerful menu

driven OSD (On Screen Display) system. A convenient *Auto Scan* feature also permits automatic scanning and monitoring of the activities of all computers running on the installation one by one.

Since a single console manages all of the computers on your installation, a CS-1708 / CS-1716 KVM switch setup: (1) eliminates the expense of having to purchase a separate keyboard, monitor, and mouse for each computer; (2) saves all the space those extra components would take up; (3) saves on energy costs; and (4) eliminates the inconvenience and wasted effort involved in constantly moving from one computer to another.

Features

- A single KVM console (USB Keyboard, Monitor, and USB Mouse) controls 8 (CS-1708) or 16 (CS-1716) computers - daisy chain up to 31 additional units - control up to 256 or 512 computers from a single console
- Easy installation - no software required
- Hot pluggable - add or remove computers for maintenance without powering down the switch - port names are automatically reconfigured when the station sequence is changed
- LED Display For Easy Status Monitoring
- Auto Scan feature for monitoring user-selected computers
- Convenient computer selection via *Hotkeys* and intuitive OSD menus
- OSD is mouse-driven for quick and efficient menu navigation - OSD port list automatically expands when stations are added - OSD screen automatically adjusts to resolution changes
- OSD or hotkey selection of the OS and keyboard language
- Keyboard and mouse emulation - computers boot even when the console focus is elsewhere
- Supports Microsoft IntelliMouse and the scrolling wheel on most mice - Supports Logitech and Microsoft wireless keyboards and mice

- Multimedia keyboard support
- Administrator/User password authorization for enhanced security (PSP); administrator synchronized confirmation between master and slave stations
- Two types of logout - manual and timed
- Superior video quality - 2048 x 1536; DDC2B
- DDC emulation - video settings of each computer is automatically adjusted for optimum output to the monitor
- Upgradable firmware - all switches upgraded at the same time via the daisy chain bus
- Backward compatible with the Master View CS-1216A KVM switch series
- Compatible with multiple operating platforms: PC, Mac, and Sun
- Supports: Windows 98 or higher; Mac OS8.6 or higher; Sun Blade 2000/100 (Solaris 8); Linux Red Hat 7.1 or higher
- Rack mountable in 19" system rack (1U)

Hardware Requirements

Console

- A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation.
- A USB mouse
- A USB keyboard

Computer

The following equipment must be installed on each computer:

- A VGA, SVGA or Multisync card.
- Type A USB port.

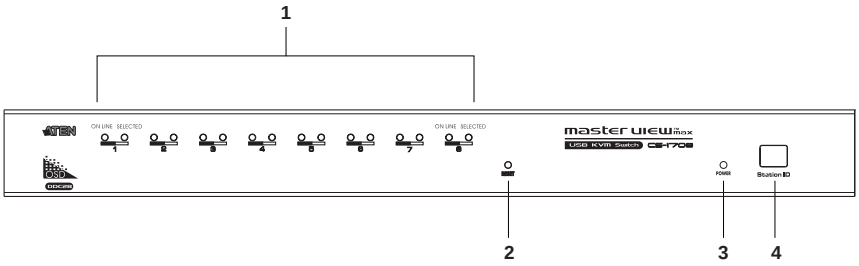
Cables

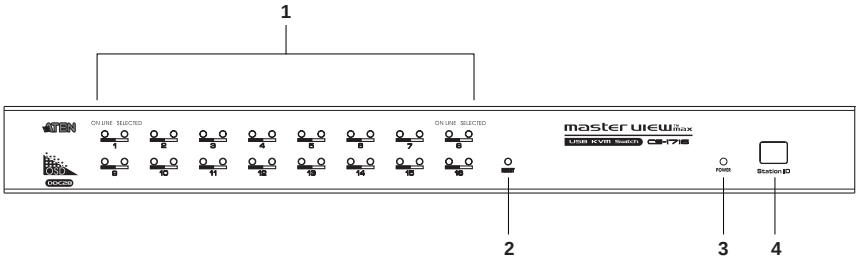
Substandard cables may damage the connected devices or degrade overall performance. For optimum signal integrity and to simplify the layout, we strongly recommend that you use the high quality CS Custom Cable sets described below:

Cable Type	Length	Part Number
Daisy Chain	0.6m	2L-1700
Daisy Chain	1.8m	2L-1701
USB KVM	1.2m	2L-5201U
USB KVM	1.8m	2L-5202U
USB KVM	3.0m	2L-5203U

To purchase CS Custom KVM cable sets, contact your dealer.

CS-1708 / CS-1716 Front View





1. Port LEDs:

The Port LEDs provide status information about their corresponding CPU Ports. There is one pair of LEDs for each Port. The one on the left is the *On Line* LED; the one on the right is the *Selected Port* LED:

- An *On Line* LED lights ORANGE to indicate that the computer attached to its corresponding port is up and running.
- A *Selected* LED lights GREEN to indicate that the computer attached to its corresponding port is the one that has the KVM focus. The LED is steady under normal conditions, but flashes when its port is accessed under *Auto Scan Mode* (see p. 35).
- When the CS-1708 is first powered on, the *On Line* and *Selected* LEDs blink in sequence as the Switch performs a self-test.

2. Reset Switch:

Pressing this switch in performs a system reset. The switch is recessed and must be pushed with a thin object - such as the end of a paper clip, or a ball point pen.

3. Power LED:

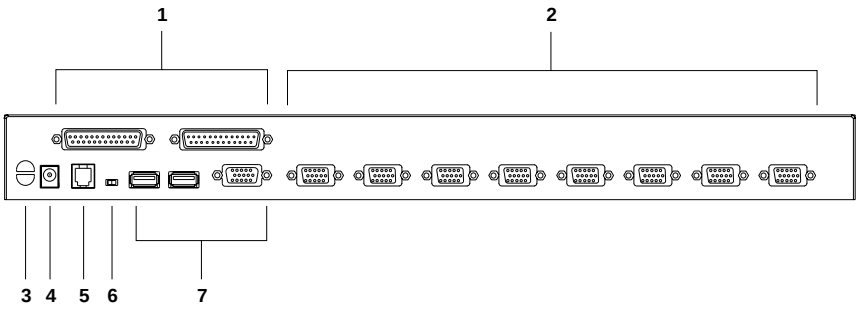
The Power LED lights to indicate that the CS-1708 is powered up and ready to operate.

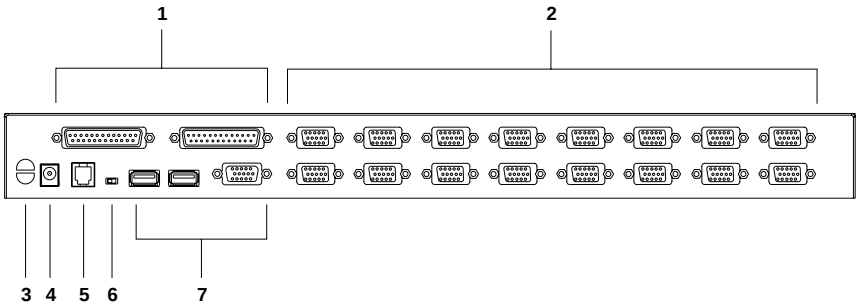
4. Station ID LED:

The CS-1708's Station ID is displayed here. If this is a Single Station installation (see p. 9), or the First Station on a Daisy Chained installation (see p. 11), the CS-1708 has a Station ID of **01**.

On a Daisy Chained installation, the CS-1708 auto-senses its position and displays the Station ID that corresponds to its place in the chain. (see *Port ID Numbering*, p. 14 for details).

CS-1708 / CS-1716 Rear View





1. **Daisy Chain Ports:**

   When Daisy Chaining Units, the cables plug in here. The port on the left is the *Chain In* port; the one on the right is the *Chain Out* port.

2. **CPU Port Section:**

   The cables that link to the computers plug in here. The shape of these connectors has been specifically modified so that only cables designed to work with this switch can plug in.

3. **Cable Tie Slot:**

   If you want to use a cable tie to gather the cables together, you can run it through this slot to attach it to the unit.

4. **Power Jack:**

   The power adapter cable plugs in here.

5. **Firmware Upgrade Port:**

   The *Firmware Upgrade Cable* that transfers the firmware upgrade data from the administrator's computer to the CS-1708 / CS-1716 (see p. 37), plugs into this RJ-11 socket.

6. **Firmware Upgrade Recovery Switch:**

   During normal operation and while performing a firmware upgrade, this switch should be in the NORMAL position. See p. 43 for details about the use of this switch.

7. **Console Port Section:**

   If this is a Single Station installation, or if this is the First Station unit of a daisy chained installation, your USB keyboard, monitor, and USB mouse plug in here.

Installation

Before you Begin

1. Make sure that power to all the devices you will be connecting up have been turned off. You must unplug the power cords of any computers that have the *Keyboard Power On* function. Otherwise, the switch will receive power from the computer.
2. To prevent damage to your installation make sure that all devices on the installation are properly grounded.

Single Stage Installation

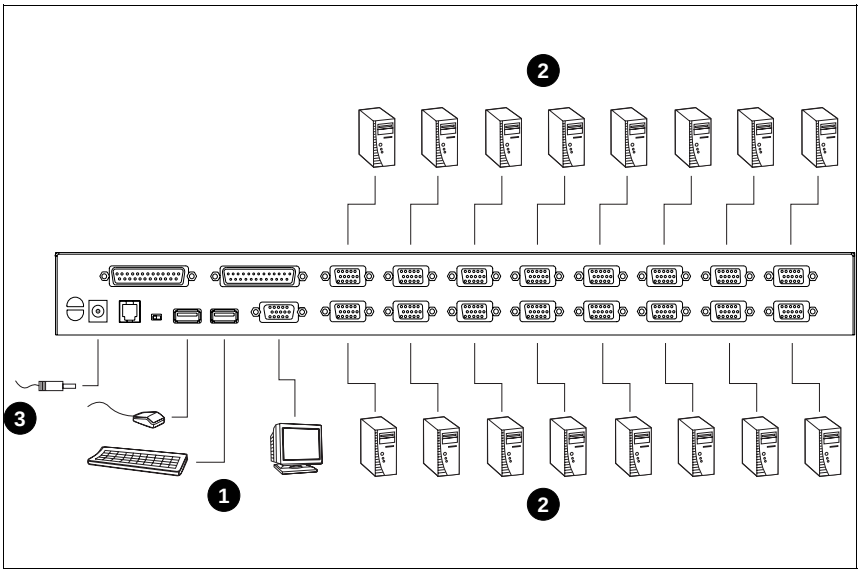
Refer to the installation diagrams on the next page as you perform the following steps. The numbers in the diagrams correspond to the steps:

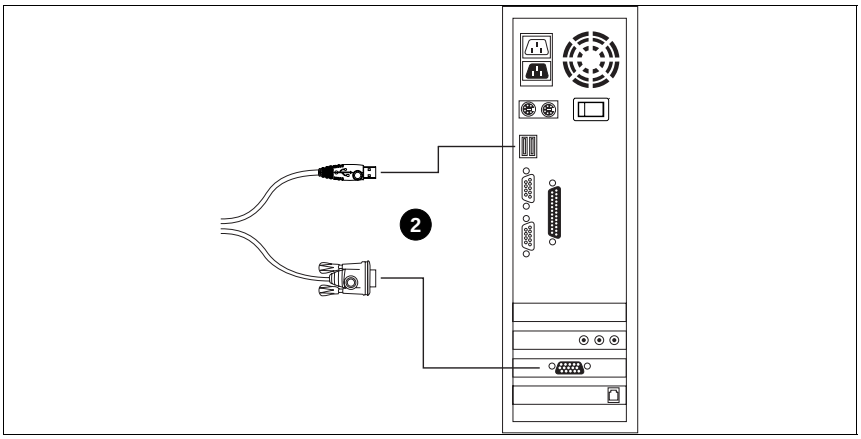
1. Plug your USB keyboard, monitor, and USB mouse into the Console Ports located on the unit's rear panel.
2. Use KVM cable sets to connect any available CPU Port to the video and USB ports of the computers you are connecting up.

   Note: 1. Two cable sets are supplied with this package; additional sets require a separate purchase. See the *Cables* section on p. 4 for details.

   2. The shape of the 15-pin CPU Port connectors has been specifically modified so that only KVM cables designed to work with this switch can plug in.
3. Plug the power adapter cable into the switch's Power Jack, then plug the power adapter into an AC power source.

This completes the single stage installation, and you can turn on the power to the computers.


2
3
1
2


2

Daisy Chaining

To control even more computers, up to 31 additional switches can be daisy chained down from the first unit. As many as 512 computers can be controlled from a single console in a complete installation. Tables showing the relation between the number of computers and the number of Master View CS-1708 / CS-1716 units needed to control them are provided on p. 45 in the Appendix.

To set up a daisy chained installation, do the following:

1. Make sure that power to all the devices you will be connecting up has been turned off.
2. Use a daisy chain cable set (described in the *Cables* section, p. 4), to connect the *Chain Out* port of the parent switch to the *Chain In* port of the child switch (First Station Out to Second Station In, Second Station Out to Third Station In, etc.).

   Note: You cannot use the *Chain In* port of the First Station Master View, since it is the highest level parent.
3. Use KVM cable sets (described in the *Cables* section, p. 4), to connect any available CPU Port on the CS-1708 / CS-1716 installation to the Keyboard, Video and Mouse ports of the computers you are installing.
4. Repeat the above steps for any additional CS-1708 / CS-1716 units you wish to add to the chain.
5. Power up the installation according to the following procedure:

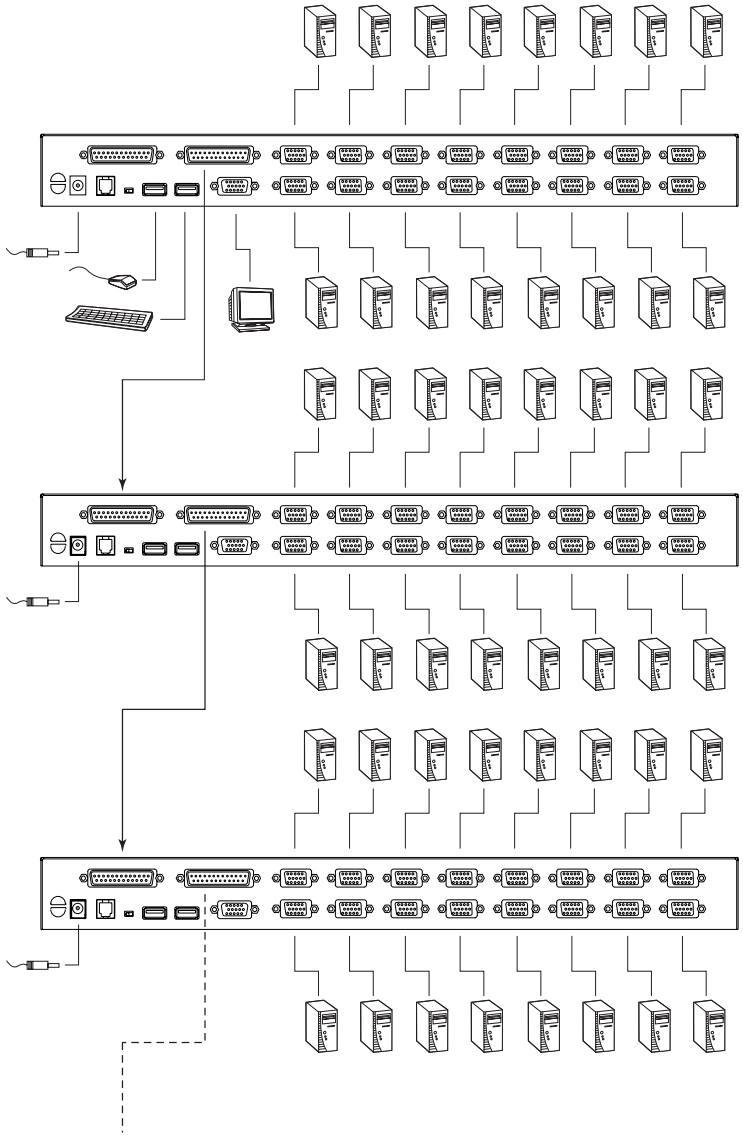
   a) Plug in the power adapter for the First Station.

   Wait for the unit to ascertain its Station ID and display it on the Station ID LED. (The Station ID for the First Stage unit is **01**, the ID for the Second Stage unit is **02**, the ID for the Third Stage unit is **03**, etc.).

   b) Plug in the power adapters for each Station on the installation in turn (Second Station, then Third Station, etc.).

   In each case, wait for the Station ID to be ascertained and displayed on the current Station before plugging in the next one.

   c) After all the Stations are up, power on the computers.



Hot Plugging

The CS-1708 / CS-1716 supports *hot plugging* - components can be removed and added back into the installation by unplugging their cables from the ports without the need to shut the unit down. In order for hot plugging to work properly, however, the procedures described below must be followed:

■ Switching Station Positions:

You can switch station positions by simply unplugging from the old parent and plugging into a new one.

■ Hot Plugging CPU Ports:

In order for the OSD menus to correspond to a CPU port change, you must manually reconfigure the OSD to reflect the new port information. See SCAN/SKIP MODE under the *F3 SET* function (p. 27), and the two *Set Port* selections under the *F4 ADM* function (p. 29), for details.

Note: If the computer's Operating System does not support hot plugging, this function may not work properly.

■ Hot Plugging Console Ports:

The keyboard, monitor, and mouse can all be hot plugged. When hot plugging the mouse:

1. You may unplug and replug the mouse (to reset the mouse, for example), as long as you use the *same* mouse.
2. If you plug in a different mouse, all the stations and all the computers on the installation must be shut down for 10 seconds, then restarted following the Power Up Sequence described on p. 11.)

   Note: If, after hot plugging there is no response to keyboard and/or mouse input, perform a *Keyboard and Mouse Reset* by pressing in the Reset switch (see p. 6).

Port ID Numbering

Each CPU port on a Master View installation is assigned a unique Port ID. The Port ID is made up of two parts: a two-digit *Station Number*, and a two-digit *Port Number*:

- The *Station Number* - reflects the switch's position in the daisy chain sequence. This corresponds to the number displayed on the front panel Station ID LED.
- The *Port Number* - reflects the port on the Station that the computer is connected to.
- The Station Number precedes the Port Number.
- Station and Port numbers from 1 - 9 are padded with a preceding zero, so they become 01 - 09.

For example, a computer attached to **Port 6** of **Station 12** would have a Port ID of: **12-06**.

Powering Off and Restarting

If it becomes necessary to Power Off one of the switches, unplug its power adapter cable from the power jack.

Before starting it back up you must do the following:

1. Shut down all the computers that are attached to it.

   Note: Unplug the power cords of any computers that have the *Keyboard Power On* function. Otherwise, the switch will still receive power from the computers.

2. Wait 10 seconds, then plug the power adapter back in.
3. After the CS-1708 / CS-1716 is up, Power On the computers.

Note: If you have shut down more than one Station, power up the highest Station first and work your way down to the lowest one.

Chapter 3.
Hotkey Operation

The CS-1708 / CS-1716 's hotkey function makes it convenient to control your KVM installation from the keyboard.

Note: The hotkey function must be enabled to use hotkey operations. See *Hotkey Command Mode*, p. 28 for details.

Invoking Hotkey Mode (HKM)

All hotkey operations begin by invoking HKM. To invoke HKM, do the following:

1. Press and hold down the **Num Lock** key
2. Press and release the **Minus** key
3. Release the **Num Lock** key

   `[Num Lock] + [-]`

   Note: 1. The minus key must be released within one half second, otherwise Hotkey invocation is canceled.

   2. There is an alternate invocation combination (see p. 18 for details.)

When HKM is active:

- The Caps Lock, and Scroll Lock LEDs flash in succession to indicate that HKM is in effect. They stop flashing when you exit HKM.
- A Command Line appears on the monitor screen. The command line prompt is the word *Hotkey:* in yellow text on a blue background. Hotkey information that you key in displays on the command line.
- Ordinary keyboard and mouse functions are suspended - only Hotkey compliant keystrokes and mouse clicks (described in the sections that follow), can be input.
- At the conclusion of some hotkey operations, you automatically exit hotkey mode. With others, you must exit manually by pressing the **Esc** key, or the **Spacebar**.

Hotkey Port Access

Hotkey Port Access allows you to select which computer has the KVM focus. The CS-1708 / CS-1716 provides the following Hotkey Port Access features:

- Selecting the Active Port
- Auto Scan Mode

Selecting the Active Port:

You can bring the KVM focus to any computer with a hotkey combination that specifies its Port ID (see p. 14 for Port ID Numbering details):

1. Invoke HKM (see p. 15).
2. Key in the computer's Port ID number.

   The Port ID numbers display on the Command Line as you key them in. If you make a mistake, use [Backspace] to erase the wrong number.
3. Press [Enter].

   The KVM focus switches to the computer associated with the specified Port ID, and you automatically exit Hotkey Mode.

Auto Scan Mode:

The CS-1708 / CS-1716's Auto Scan feature automatically switches among all the active CPU Ports that are accessible to the currently logged on User at regular intervals (see *Scan Mode* of the OSD **F3 SET** function, p. 28), so that he can monitor their activity automatically.

To start Auto Scanning, key in the following Hotkey combination:

1. Invoke Hotkey Mode (see p. 15)
2. Key in [A]

   After you press **A**, you automatically exit Hotkey Mode, and enter Auto Scan Mode.
3. To exit Auto Scan Mode, press [Esc] or [Spacebar]; or Right Click with the mouse.

   Note: While Auto Scan Mode is in effect, ordinary keyboard and mouse functions are suspended - only Auto Scan Mode compliant keystrokes and mouse clicks can be input. You must exit Auto Scan Mode in order to regain normal control of the console.

   While you are in Auto Scan Mode, you can pause the scanning in order to keep the focus on a particular computer by pressing **P**, or with a **Left Click** of the mouse.

   During the time that Auto Scanning is paused, the Command Line displays: **Auto Scan: Paused.**

   Pausing when you want to keep the focus on a particular computer is more convenient than Exiting Auto Scan Mode because when you Resume scanning, you start from where you left off. If, on the other hand, you Exited and restarted, Scanning would start over from the very first computer on the installation.

   After pausing, to resume Auto Scanning, press any key. Scanning continues from where it left off.

Hotkey Configuration

Alternate Hotkey Invocation Keys:

An alternate set of Hotkey Invocation keys is provided in case the default set conflicts with programs running on the computers.

To switch to the alternate Hotkey Invocation set, do the following:

1. Invoke HKM (see p. 15)
2. Press and release the **H** key

The Hotkey Invocation keys become the Ctrl key (instead of Num Lock) and the F12 key (instead of Minus).

Note: This procedure is a toggle between the two methods. To revert back to the original [Num Lock] [Minus] method, invoke HKM, then press and release the **H** key again.

Alternate OSD Invocation Keys:

The OSD activation method can be changed from tapping the Scroll Lock key twice to tapping the Ctrl key twice ([Ctrl] [Ctrl]). To change the OSD Invocation method, do the following:

1. Invoke HKM (see p. 15)
2. Press and release the **T** key

Note: This procedure is a toggle between the two methods. To revert back to the original [Scroll Lock] [Scroll Lock] method, invoke HKM, then press and release the **T** key again.

Platform Setup:

The CS-1708 / CS-1716's default port settings are for a PC Compatible operating platform. You can modify the platform setting for each port by bringing the KVM focus to the port you want to change and using the hotkey combinations shown in the table below.

Key	Operation
[F1]	Sets the PC Compatible keyboard operating platform for the port that currently has the KVM focus.
[F2]	Sets the Mac keyboard operating platform for the port that currently has the KVM focus.
[F3]	Sets the Sun keyboard operating platform for the port that currently has the KVM focus.
[R] [Enter]	Reset everything to the default settings.

The Hotkey entry method is as follows:

1. Invoke HKM (see p. 15)
2. Press and release the appropriate Function key (see table).

After completing a setting, you automatically exit HKM.

Note: The brackets indicate the keys you should press. Simply press the indicated keys - do not type the brackets.

Miscellaneous Actions:

Hotkeys are also used to reset the USB, and toggle the beeper On and Off. To perform any of these operations, do the following:

1. Invoke HKM (see p. 15)
2. Press and release the appropriate action key (see table).

Key	Operation
[F5]	Performs a USB reset
B	Toggles the Beeper On or Off. The Command Line displays *Beeper On* or *Beeper Off* for one second; then the message disappears and you automatically exit HKM.

After completing a setting, you automatically exit HKM.

Keyboard Emulation

Sun Keyboard:

The PC Compatible (101/104 key) keyboard can emulate the functions of the Sun keyboard when the Control key [Ctrl] is used in conjunction with other keys. The corresponding functions are shown in the table below.

Note: When using [Ctrl] combinations, press and release the **Ctrl** key, then press and release the activation key.

PC Keyboard	Sun Keyboard
[Ctrl] [T]	Stop
[Ctrl] [F2]	Again
[Ctrl] [F3]	Props
[Ctrl] [F4]	Undo
[Ctrl] [F5]	Front
[Ctrl] [F6]	Copy
[Ctrl] [F7]	Open
[Ctrl] [F8]	Paste
[Ctrl] [F9]	Find
[Ctrl] [F10]	Cut
[Ctrl] [1]	▭ 🔇
[Ctrl] [2]	◑- 🔉
[Ctrl] [3]	◑+ 🔊
[Ctrl] [4]	☾
[Ctrl] [H]	Help
App	Compose
Win Key	◆

Mac Keyboard:

The PC Compatible (101/104 key) keyboard can emulate the functions of the Mac keyboard. The emulation mappings are listed in the table below.

Note: When using key combinations, press and release the first key (Ctrl or Alt), then press and release the activation key.

PC Keyboard	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
[Win]	⌘
F12	⏏
[Alt]	L Alt/Option
[Prt_Sc]	F13
[Scroll Lock]	F14
[Desktop Menu]	=
[Enter]	Return
[Back Space]	Delete
[Ins]	Help
[Ctrl] [Desktop Menu]	F15

Chapter 4.

OSD Operation

OSD Overview

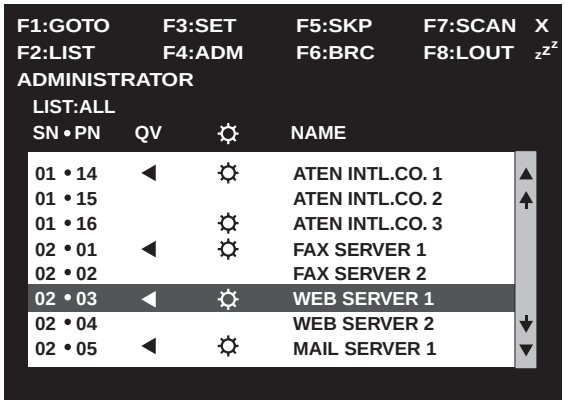
The On Screen Display (OSD) is used to handle all computer control and switching procedures. All procedures start from the OSD Main Screen. To pop up the Main Screen, tap the **[Scroll Lock]** key twice.

Note: You can change the Hotkey to the Ctrl key (see *OSD Hotkey*, p. 27).

The OSD incorporates a two level (Administrator / User) authorization system. Before the OSD Main Screen comes up, a dialog box appears that asks you to provide your Username and Password. If the Password Function has been set (see p. 29), you must provide them in order to access the OSD Main Screen.

If this is the first time that the OSD is being run, or if the password function has not been set, simply press **[Enter]** when the authorization dialog box appears. The OSD Main Screen comes up in Administrator Mode, with access to all functions.

When you invoke the OSD, a screen similar to the one below appears:


F1:GOTO F3:SET F5:SKP F7:SCAN X
F2:LIST F4:ADM F6:BRC F8:LOUT zzz
ADMINISTRATOR
LIST:ALL
SN • PN QV NAME
01 • 14 ATEN INTL.CO. 1
01 • 15 ATEN INTL.CO. 2
01 • 16 ATEN INTL.CO. 3
02 • 01 FAX SERVER 1
02 • 02 FAX SERVER 2
02 • 03 WEB SERVER 1
02 • 04 WEB SERVER 2
02 • 05 MAIL SERVER 1

Please note the following:

- The diagram depicts the Administrator's Main Screen. The User Main Screen does not show the **F4 ADM** function.
- OSD always starts in List view, with the highlight bar at the same position it was in the last time it was closed.
- Only the ports that have been set accessible by the Administrator for the currently logged in User are visible (see *Set Accessible Ports*, p. 31, for details).

OSD Navigation

- To dismiss the menu, and deactivate OSD, Click the **X** at the upper right corner of the OSD Window; or press **[Esc]**.
- To Logout, Click **F8** or the z^{Z^z} symbol at the top of the Main Screen, or press **[F8]**.
- To move up or down through the list one line at a time, Click the Up and Down Triangle symbols (▲▼) or use the Up and Down Arrow Keys. If there are more list entries than what can appear on the Main Screen, the screen will scroll.
- To move up or down through the list one screen at a time, Click the Up and Down Arrow symbols (🡅🡇), or use the [Pg Up] and [Pg Dn] keys. If there are more list entries than what can appear on the Main Screen, the screen will scroll.
- To activate a port, Double Click it, or move the Highlight Bar to it then press [Enter].
- After executing any action, you automatically go back to the menu one level above.

OSD Main Screen Headings

Heading	Explanation
SN-PN	This column lists the Port ID numbers (see *Port ID Numbering*, p. 14), for all the CPU ports on the installation. The simplest method to access a particular computer is move the Highlight Bar to it, then press [Enter].
QV	If a port has selected for Quick View scanning (see *Set Quick View Ports*, p. 31), an arrowhead symbol displays in this column to indicate so.
☼	The computers that are powered on and are On Line have a Sun symbol in this column to indicate so.
NAME	If a port has been given a name (see Edit *Port Names*, p. 30), its name appears in this column.

OSD Functions

OSD functions are used to configure and control the OSD. For example, you can: rapidly switch to any port; scan selected ports only; limit the list you wish to view; designate a port as a Quick View Port; create or edit a port name; or make OSD setting adjustments.

To access an OSD function:

1. Either Click a Function Key field at the top of the Main Screen, or press a Function Key on the keyboard.
2. In the Submenus that appear make your choice either by Double Clicking it, or moving the Highlight Bar to it, then pressing **[Enter]**.
3. Press **[Esc]** to return to the previous menu level.

F1 GOTO:

GOTO allows you to switch directly to a port either by keying in the port's *Name*, or its *Port ID*.

- To use the Name method, key in **1**; key in the port's Name; then press [Enter].
- To use the Port ID method, key in **2**; key in the *Port ID*; then press [Enter].

Note: You can key in a partial Name or Port ID. In that case, the screen will show all the computers that the User has *View* rights to (see *Set Accessible Ports*, p. 31), that match the Name or Port ID pattern, regardless of the current *List* settings (see p. 26).

To return to the OSD Main Menu without making a choice, press [Esc].

F2 LIST:

The LIST function lets you broaden or narrow the scope of which ports the OSD displays (lists) on the Main Screen.

Many of the OSD functions only operate on the computers that have been selected for listing on the Main Screen with this function. The choices and their meanings are given in the table below:

Choice	Meaning
ALL	Lists all of the ports on the installation.
QUICK VIEW*	Lists only the ports that have been selected as Quick View Ports (see p. 31).
POWERED ON	Lists only the ports that have their attached computers Powered On.
QUICK VIEW + POWERED ON*	Lists only the ports that have been selected as Quick View Ports (see p. 31), and that have their attached computers Powered On.

***** These items only show up on the Administrator's screen, since only he has *Quick View* setting rights (see p. 31, for details).

Move the Highlight Bar to the choice you want, then press [Enter]. An icon appears before the choice to indicate that it is the currently selected one.

After you make your choice and press [Enter], you return to the OSD Main Screen with the newly formulated List displayed.

F3 SET:

This function allows the Administrator and each User to set up their own working environment. A separate profile for each is stored by the OSD and is activated according to the Username that was provided during Login. To change a setting:

1. Double Click it; or move the highlight bar to it, then press **[Enter]**.
2. After you select an item, a submenu with further choices appears. To make a selection, either Double Click it; or move the Highlight Bar to it, then press **[Enter]**. An icon appears before the selected choice to indicate which one it is. The settings are explained in the following table:

Setting	Function
OSD HOTKEY	Selects which Hotkey activates the OSD function: **[Scroll Lock] [Scroll Lock]** or [**Ctrl] [Ctrl]**. Since the Ctrl key combination may conflict with programs running on the computers, the default is the Scroll Lock combination.
PORT ID DISPLAY POSITION	Allows you to position where the Port ID appears on the screen. The default is the upper left corner, but you can choose to have it appear anywhere on the screen. You can use the mouse to position the Port ID Display, or you can use the Arrow Keys plus Pg Up, Pg Dn, Home, End, and 5 (on the numeric keypad with Num Lock off), to position the Port ID display, then press [Enter] to lock the position and return to the Set submenu.
PORT ID DISPLAY DURATION	Determines how long a Port ID displays on the monitor after a port change has taken place. The choices are: **User Defined** - which lets you select the amount of time (from 1 - 255 sec.); and **Always On** - which displays the Port ID at all times. If you select User Defined, key in the number of seconds, then press [Enter]. The default is 3 Seconds.

(Table continues on next page)

(F3 SET: continued)

Setting	Function
PORT ID DISPLAY MODE	Selects how the Port ID is displayed: the Port Number alone (**PORT NUMBER**); the Port Name alone (**PORT NAME**); or the Port Number plus the Port Name (**PORT NUMBER + PORT NAME**). The default is PORT NUMBER + PORT NAME.
SCAN DURATION	Determines how long the focus dwells on each port as it cycles through the selected ports in Auto Scan Mode (see p. 35). Key in a value from 1 - 255 seconds, then press [Enter]. Default is 5 seconds; a setting of 0 disables the Scan function.
SCAN/SKIP MODE	Selects which computers will be accessed under Auto Scan Mode (see p. 35). Choices are: **ALL** - All the Ports which have been set Accessible (see p. 31); **POWERED ON** - Only those Ports which have been set Accessible and are Powered On; **QUICK VIEW** - Only those Ports which have been set Accessible and have been selected as Quick View Ports (see p. 31); **QUICK VIEW + POWERED ON** - Only those Ports which have been set Accessible and have been selected as Quick View Ports and are Powered On. The default is ALL. **Note:** The Quick View choices only show up on the Administrator's screen, since only he has *Quick View* setting rights (see p. 31, for details).
SCREEN BLANKER	If there is no input from the console for the amount of time set with this function, the screen is blanked. Key in a value from 1 - 30 minutes, then press [Enter]. A setting of 0 disables this function. The default is 0.
HOTKEY COMMAND MODE	Enables / Disables the Hotkey function (see p. 15) in case there is a conflict with programs running on the computers. *On* enables the function, *Off* disables it. The default is On.
HOTKEY	Selects which keys invoke Hotkey Mode (see p. 15): **[Num Lock] [-]** or **[Ctrl] [F12]**. The default is [Num Lock] [-].

F4 ADM:

F4 is an Administrator only function. It allows the Administrator to configure and control the overall operation of the OSD. To change a setting Double Click it; or use the Up and Down Arrow Keys to move the highlight bar to it then press **[Enter]**.

After you select an item, a submenu with further choices for you to select from appears. Double Click the choice you want, or move the Highlight Bar to it then press **[Enter]**. An icon appears before the selected choice so that you know which one it is. The settings are explained in the following table:

Setting	Function
SET USERNAME AND PASSWORD	This function is used to set Usernames and Passwords for the Administrator and Users: 1. Usernames and Passwords for one Administrator and four Users can be set. 2. After you select one of the User fields or the Administrator field, a screen that allows you to key in a Username and Password appears. The Username and Password may be up to 12 characters long, and can consist of any combination of letters and numbers (A - Z, 0 - 9). 3. For each individual, key in the Username and Password, then press [Enter]. 4. To modify or delete a previous Username and/or Password, use the backspace key to erase individual letters or numbers.
SET LOGOUT TIMEOUT	If there is no input from the console for the amount of time set with this function, the Operator is automatically logged out. A login is necessary before the console can be used again. This enables other Operators to gain access to the computers when the original Operator is no longer accessing them, but has forgotten to log out. To set the timeout value, key in a number from 1 - 180 minutes, then press [Enter]. If the number is 0 [zero], this function is disabled. Default is 0.

(Table continues on next page)

(F4 ADM: continued)

Setting	Function
EDIT PORT NAMES	To help remember which computer is attached to a particular port, every port can be given a name. This function allows the Administrator to create, modify, or delete port names. **Note:** Only the Ports currently chosen for the LIST view on the main OSD screen (see p. 26), show up here. To Edit a port name: 1. Use the Navigation Keys to move the highlight bar to it, then press **[Enter]**. 2. Key in the new Port Name, or modify/delete the old one. The maximum number of characters allowed for the Port Name is 12. Legal characters include: ◆ All alpha characters: **a - z; A - Z** ◆ All numeric characters: **0 - 9** ◆ **+ - / : . % ( ) [ ] ' ?** and **Space** Case does not matter; OSD displays the Port Name in all capitals no matter how they were keyed in. 3. When you have finished editing, press **[Enter]** to have the change take effect. To abort the change, press **[Esc]**.
RESTORE DEFAULT VALUES	This function is used to undo all changes and return the setup to the original factory default settings. (Except for the *Names* that were assigned to the Ports. The names are kept.)
CLEAR THE NAME LIST	This function is similar to Restore Default Values. The difference is that it also clears the Port Names along with undoing all changes and returning the setup to the original factory default settings.
ACTIVATE BEEPER	Choices are **Y** (for On), or **N** (for Off). When activated, the beeper sounds whenever a Port is changed; when activating the Auto Scan function (see p. 35); or an invalid entry is made on an OSD menu. The default is Y.

(Table continues on next page)

(F4 ADM: continued)

Setting	Function
SET QUICK VIEW PORTS	This function lets the Administrator select which Ports to include as Quick View ports. **Note:** Only the Ports currently chosen for the LIST view on the main OSD screen (see p. 26), show up here. ◆ To select/deselect a port as a Quick View Port, use the Navigation Keys to move the highlight bar to it, then Press [Space]. ◆ When a port has been selected as a Quick View Port, an arrowhead displays in the QV column of the LIST on the Main Screen to indicate so. When a port is deselected, the arrowhead disappears. ◆ If one of the Quick View options is chosen for the LIST view (see p. 26), only Ports that have been selected here will show up on the LIST display on the main OSD screen. ◆ If one of the Quick View options is chosen for Auto Scanning (see p. 28), only Ports that have been selected here will be Auto Scanned. The default is for no ports to be selected.
SET ACCESSIBLE PORTS	This function allows the Administrator to define User access to the computers on the installation on a Port-by-Port basis. For each User, select the target Port; then press the **[Spacebar]** to cycle through the choices: **F** (Full access), **V** (View Only) or blank. Repeat until all access rights have been set, then press **[Esc]**. The default is **F** for all users on all Ports. **Note:** A blank setting means that no access rights are granted. The Port will not show up on the User's LIST on the Main Screen.

(Table continues on next page)

(F4 ADM: continued)

Setting	Function
RESET STATION IDS	If you change the position of one of the Stations in the daisy chain, the OSD settings will no longer correspond to the new situation. This function directs the OSD to rescan the Station positions of the entire installation and updates the OSD so that the OSD Station information corresponds to the new physical layout. **Note:** Only the Station Numbers get updated. Except for the Port Names, all Administrator settings (such as Set Accessible Ports, Set Quick View Ports, etc.), for all of the computers affected by the change, have to be manually redone.
SET OPERATING SYSTEM	Specifies the operating platform of the computer attached to each port. For each port, press the **[Spacebar]** to cycle through the choices (PC, Sun, Mac, and SPC*). Repeat until all the ports have been set, then press **[Esc]**. The default is PC.
FIRMWARE UPGRADE	In order to upgrade the CS-1708 / CS-1716's firmware (see p. 37), you must first invoke *Firmware Upgrade Mode* with this setting.
KEYBOARD LANGUAGE	Sets the keyboard language layout for the computer attached to each port. Choices are: Auto, English, French, German, and Japanese. Auto (the default), sets the keyboard language according to the keyboard language of the computer.

***** 1. PC stands for PC compatible. This is the choice that should be made for all operating systems other than Sun and Mac.

2. If you are installing a Sun or Mac computer, before you run it for the first time you must set the correct operating system for the port it is connected to with this function, otherwise, it will not boot.

3. SPC stands for Special Case. For certain operating systems (such as FSBD), you may need to choose this option if you run into startup problems. If this occurs, please contact technical support for further information

F5 SKP:

Skip (SKP) Mode enables you to easily skip backward or forward - switching the console focus from the currently active computer port to the previous or next available one.

- The selection of computers to be available for Skip Mode switching is made with the *Scan/Skip Mode* setting under the **F3 SET** function (see p. 28).
- When you are in Skip Mode, press **[←]** to switch to the previous computer in the List; press **[→]** to switch to the next computer in the List; press **[↑]** to switch to the last computer on the previous station in the List; press **[↓]** to switch to the first computer on the next station in the List.

  Note: When you Skip, you only Skip to the previous or next available computer that is in the *Scan/Skip Mode* selection (see p. 28).
- If a Port has been selected for *Scan/Skip Mode*, when the focus switches to that port a Left/Right Triangle symbol appears before its Port ID Display to indicate so.
- While Skip Mode is in effect, the console will not function. You must exit Skip Mode in order to regain control of the console.
- To exit Skip Mode, press the [Spacebar] or **Esc**.

F6 BRC:

F6 is an Administrator only function. When this function is in effect, commands sent from the keyboard are broadcast to all available computers on the installation.

This function is particularly useful for operations that need to be performed on multiple computers, such as performing a system wide shutdown, installing or upgrading software, etc.

BRC works in conjunction with the **F2 LIST** function. The LIST function (see p. 26), is used to broaden or narrow the focus of which Ports appear on the OSD Main Screen. When you Broadcast a command, it is to the Ports currently displayed on the OSD Main Screen.

- While BRC Mode is in effect, a Speaker symbol appears before the Port ID Display of the port that currently has the console focus to indicate so.
- While BRC Mode is in effect, the mouse will not function. You must exit BRC Mode in order to regain control of the mouse.
- To exit BRC Mode, invoke the OSD (with the OSD Hotkey), then Click the **F6** field, or press **[F6]**, to turn BRC Mode off.

F7 SCAN:

The SCAN function allows you to automatically switch among the available computers at regular intervals so that you can monitor their activity without having to take the trouble of switching manually.

- The selection of computers to be included for Auto Scanning is made with the *Scan Mode* setting under the **F3 SET** function (see p. 28).
- The amount of time that each Port displays for is set with the *Scan Duration* setting under the **F3 SET** function (see p. 28).
- If the scanning stops on an empty port, or one where the computer is attached but is powered Off, the monitor screen will be blank, and the mouse and keyboard will have no effect. Simply wait - after the *Scan Duration* time is up, the Scan function will move on to the next port.
- As each computer is accessed, an **S** appears in front of the Port ID display to indicate that it is being accessed under *Auto Scan Mode*.
- If you want to temporarily keep the focus on a particular computer, you can pause the scanning either by pressing **P**, or with a Left Click of the mouse. See *Auto Scan Mode*, p. 17, for details.
- When you want to permanently stop scanning at a particular location, press the **[Spacebar]** or **[Esc]**; or **Right Click** with the mouse to stop scanning and exit Auto Scan Mode.
- While Auto Scan Mode is in effect, the console will not function normally. You must exit Auto Scan Mode in order to regain normal control of the console.

F8 LOUT:

LOUT (Log out) logs you out of OSD control of the computers, and blanks the Console screen. After using this function you must log in all over again to regain access to the OSD.

This is different from simply pressing **[Esc]** when you are at the Main Screen to deactivate the OSD, where all you have to do to reenter the OSD is tap the OSD Hotkey.

Note: 1. When you reenter the OSD after logging out, the screen stays blank except for the OSD Main Menu. You must input your password before you can continue.

2. If you reenter the OSD after logging out, and immediately use [Esc] to deactivate the OSD without having selected a port from the OSD menu, a Null Port message displays on the screen. The OSD Hotkey will bring up the Main OSD Screen.

Chapter 5.

The Firmware Upgrade Utility

The Windows-based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth, automated process for upgrading the KVM switch's firmware.

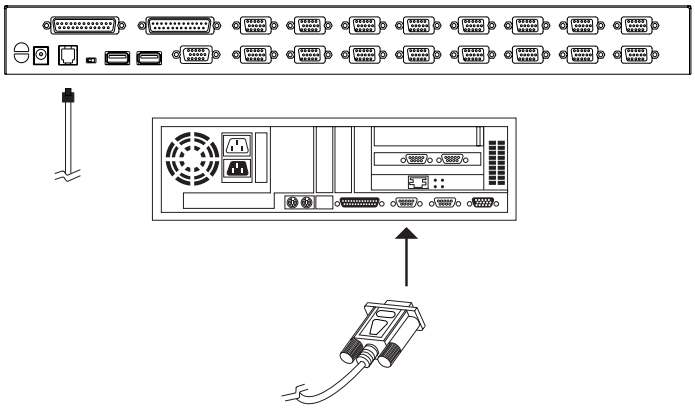
The Utility comes as part of a Firmware Upgrade Package that is specific for each device. New firmware upgrade packages are posted on our web site as new firmware revisions become available. Check the web site regularly to find the latest packages and information relating to them:

```
http://www.aten.com.tw
```

Preparation

To prepare for the firmware upgrade, do the following:

1. From a computer that is not part of your KVM installation go to our Internet support site and choose the model name that relates to your device (CS-1708 / CS-1716) to get a list of available Firmware Upgrade Packages.
2. Choose the Firmware Upgrade Package you want to install (usually the most recent), and download it to your computer.
3. Use the *Firmware Upgrade Cable* provided with this unit, to connect a COM port on your computer to the *Firmware Upgrade Port* of your switch.



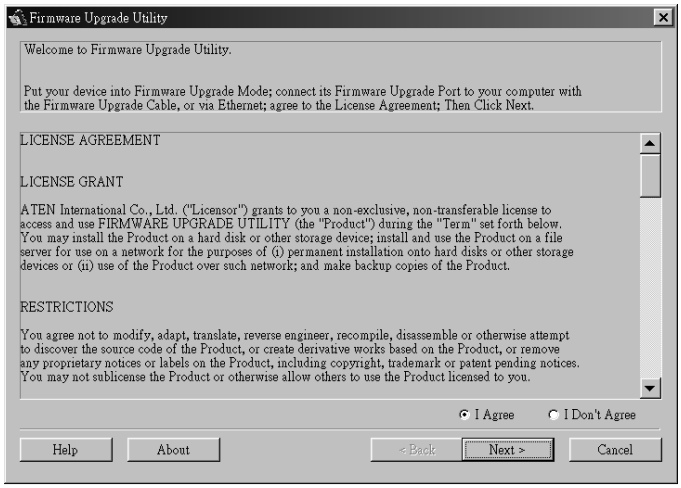
4. Shut down the computers on your CS-1708 / CS-1716 installation.
5. From your KVM switch console, bring up the OSD (see p. 23) and select the **F4ADM** function.
6. Scroll down to FIRMWARE UPGRADE (see p. 32). Press [Enter], then press [Y] to invoke Firmware Upgrade Mode For your reference, the current firmware upgrade version displays on the screen.

Starting the Upgrade

To upgrade your firmware:

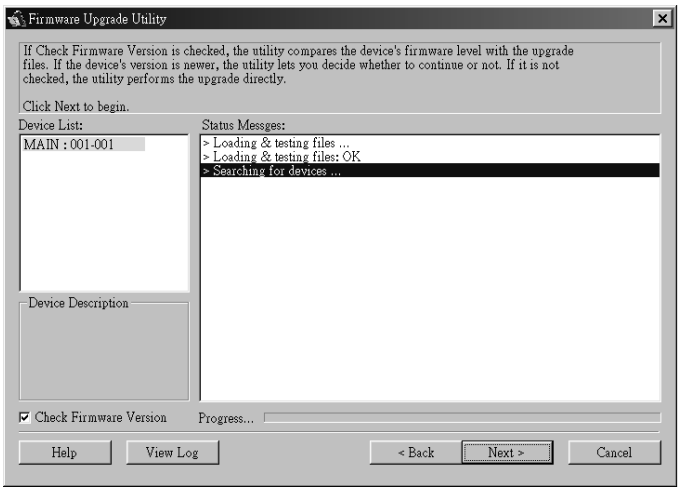
1. Run the downloaded Firmware Upgrade Package file - either by double clicking the file icon, or by opening a command line and entering the full path to it.

   The Firmware Upgrade Utility *Welcome* screen appears:


Firmware Upgrade Utility
Welcome to Firmware Upgrade Utility.
Put your device into Firmware Upgrade Mode; connect its Firmware Upgrade Port to your computer with the Firmware Upgrade Cable, or via Ethernet; agree to the License Agreement; Then Click Next.
LICENSE AGREEMENT
LICENSE GRANT
ATEN International Co., Ltd. ("Licensor") grants to you a non-exclusive, non-transferable license to access and use FIRMWARE UPGRADE UTILITY (the "Product") during the "Term" set forth below. You may install the Product on a hard disk or other storage device; install and use the Product on a file server for use on a network for the purposes of (i) permanent installation onto hard disks or other storage devices or (ii) use of the Product over such network; and make backup copies of the Product.
RESTRICTIONS
You agree not to modify, adapt, translate, reverse engineer, recompile, disassemble or otherwise attempt to discover the source code of the Product, or create derivative works based on the Product, or remove any proprietary notices or labels on the Product, including copyright, trademark or patent pending notices. You may not sublicense the Product or otherwise allow others to use the Product licensed to you.
I Agree
I Don't Agree
Help
About
< Back
Next >
Cancel

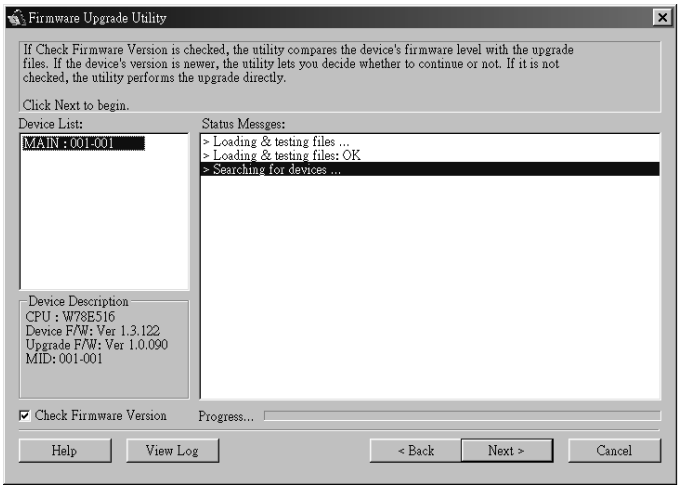
2. Read and *Agree* to the License Agreement (enable the I Agree radio button).

3. Click Next to continue. The Firmware Upgrade Utility main screen appears:


Firmware Upgrade Utility
If Check Firmware Version is checked, the utility compares the device's firmware level with the upgrade files. If the device's version is newer, the utility lets you decide whether to continue or not. If it is not checked, the utility performs the upgrade directly.
Click Next to begin.
Device List:
MAIN : 001-001
Status Messges:
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
Device Description
Check Firmware Version
Progress...
Help
View Log
< Back
Next >
Cancel

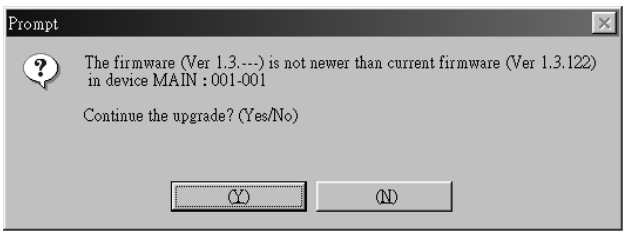
The Utility inspects your installation. All the devices capable of being upgraded by the package are listed in the *Device List* panel.

4. As you select a device in the list, its description appears in the *Device Description* panel.


Firmware Upgrade Utility
If Check Firmware Version is checked, the utility compares the device's firmware level with the upgrade files. If the device's version is newer, the utility lets you decide whether to continue or not. If it is not checked, the utility performs the upgrade directly.
Click Next to begin.
Device List:
MAIN : 001-001
Status Messges:
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
Device Description
CPU : W78E516
Device F/W: Ver 1.3.122
Upgrade F/W: Ver 1.0.090
MID: 001-001
Check Firmware Version
Progress...
Help
View Log
< Back
Next >
Cancel

5. After you have made your device selection(s), Click **Next** to perform the upgrade.

   If you enabled *Check Firmware Version*, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is higher than the upgrade version, it brings up a dialog box informing you of the situation and gives you the option to Continue or Cancel.

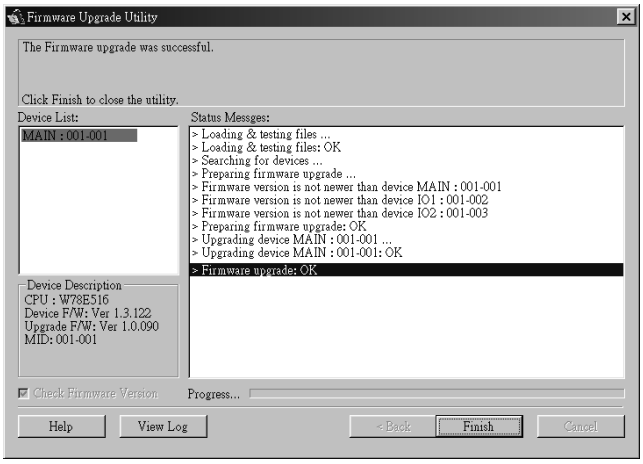

Prompt
The firmware (Ver 1.3.---) is not newer than current firmware (Ver 1.3.122) in device MAIN : 001-001
Continue the upgrade? (Yes/No)
(Y)
(N)

   If you didn't enable *Check Firmware Version*, the Utility installs the upgrade files without checking whether they are a higher level, or not.

   As the Upgrade proceeds status messages appear in the Status Messages panel, and the progress toward completion is shown on the *Progress* bar.

Upgrade Succeeded

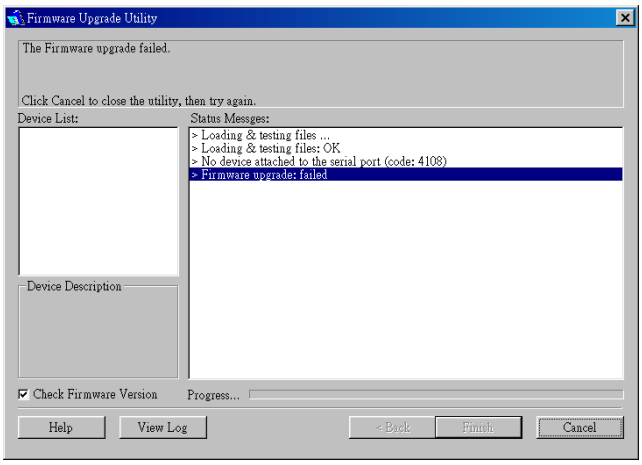
After the upgrade has completed, a screen appears to inform you that the procedure was successful:


Firmware Upgrade Utility
The Firmware upgrade was successful.
Click Finish to close the utility.
Device List:
MAIN : 001-001
Status Messges:
> Loading & testing files ...
> Loading & testing files: OK
> Searching for devices ...
> Preparing firmware upgrade ...
> Firmware version is not newer than device MAIN : 001-001
> Firmware version is not newer than device IO1 : 001-002
> Firmware version is not newer than device IO2 : 001-003
> Preparing firmware upgrade: OK
> Upgrading device MAIN : 001-001 ...
> Upgrading device MAIN : 001-001: OK
> Firmware upgrade: OK
Device Description
CPU : W78E516
Device F/W: Ver 1.3.122
Upgrade F/W: Ver 1.0.090
MID: 001-001
Check Firmware Version
Progress...
Help
View Log
< Back
Finish
Cancel

Click **Finish** to close the Firmware Upgrade Utility.

Upgrade Failed

If the upgrade failed to complete successfully a dialog box appears asking if you want to retry. Click **Yes** to retry. If you Click **No**, the *Upgrade Failed* screen appears:



Click **Cancel** to close the Firmware Upgrade Utility. See the next section, *Firmware Upgrade Recovery*, for how to proceed.

Firmware Upgrade Recovery

There are basically three conditions that call for firmware upgrade recovery:

- When you begin a firmware upgrade, but decide not to proceed with it.
- When the Mainboard firmware upgrade fails.
- When the I/O firmware upgrade fails.

Note: If one of the cascaded switches fails to upgrade successfully, unplug it from the installation and perform the recovery and upgrade operation independently. After it has been successfully upgraded, plug it back into the installation.

To perform a firmware upgrade recovery, do the following:

1. Slide the *Firmware Upgrade Recovery Switch* (see p. 8) to the **Recover** position.
2. Power off and restart the switch.
3. Repeat the upgrade procedure from *Starting the Upgrade*, p. 38.
4. Power off the switch.
5. Slide the *Firmware Upgrade Recovery Switch* back to the **Normal** position.
6. Power the switch back on.

Notes:

Appendix

Master View Connection Tables

The following tables indicate the relationship between the number of Master View Units and the number of computers that they control:

CS-1716:

MVs	Computers	MVs	Computers	MVs	Computers	MVs	Computers
1	1 - 16	9	129 - 144	17	257 - 272	25	385 - 400
2	17 - 32	10	145 - 160	18	273 - 288	26	401 - 416
3	33 - 48	11	161 - 176	19	289 - 304	27	417 - 432
4	49 - 64	12	177 - 192	20	305 - 320	28	433 - 448
5	65 - 80	13	193 - 208	21	321 - 336	29	449 - 464
6	81 - 96	14	209 - 224	22	337 - 352	30	465 - 480
7	97- 112	15	225 - 240	23	353 - 368	31	481 - 496
8	113 - 128	16	241 - 256	24	369 - 384	32	497 - 512

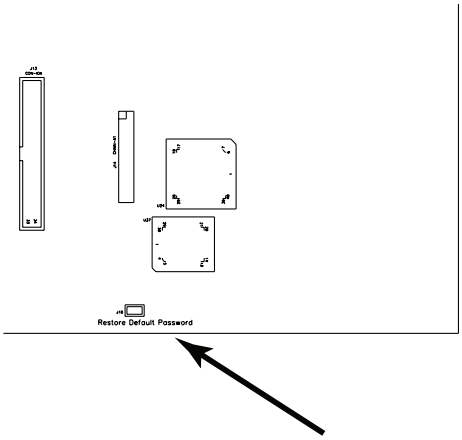
CS-1708:

MVs	Computers	MVs	Computers	MVs	Computers	MVs	Computers
1	1 - 8	9	65 - 72	17	129 - 136	25	193 - 200
2	9 - 16	10	73 - 80	18	137 - 144	26	201- 208
3	17 - 24	11	81 - 88	19	145 - 152	27	209 - 216
4	25 - 32	12	89 - 96	20	153 - 160	28	217 - 224
5	33 - 40	13	97 - 104	21	161 - 168	29	225 - 232
6	41 - 48	14	105 - 112	22	169 - 176	30	233 - 240
7	49- 56	15	113 - 120	23	177- 184	31	241 - 248
8	57 - 64	16	121 - 128	24	185 - 192	32	249 - 256

Clear Login Information

If you are unable to perform an Administrator login (because the Username and Password information has become corrupted, or you have forgotten it, for example), you can clear the login information with the following procedure:

1. Power off the switch and remove its housing.
2. Short the jumper labeled *Default Password* at the right front of the switch's main board.



3. Power on the switch.

   When you power the switch on, the following message appears on the LCD display:

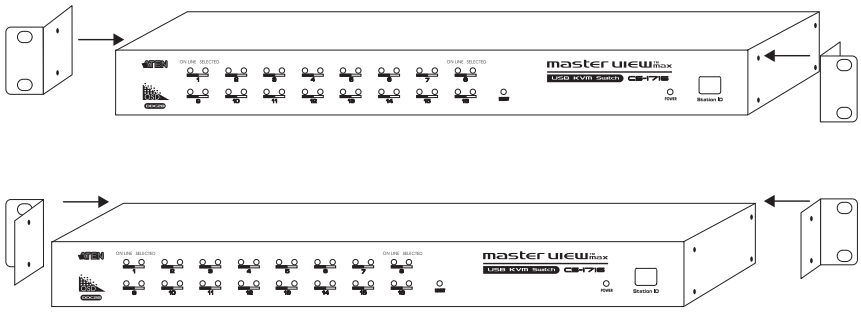
   ```
   USERNAME AND PASSWORD INFORMATION HAS BEEN CLEARED.
   PLEASE POWER OFF THE SWITCH, REMOVE THE JUMPER, CLOSE THE
   CASE, THEN RESTART.
   ```

4. After you start back up, the OSD login function acts exactly the way it did the first time the switch was run (see p. 1-23) and you can reset passwords for the Administrators and Users.

Rack Mounting

The CS-1708 / CS-1716 can be mounted in a 1U system rack. For convenience and flexibility, the mounting brackets can screw into either the front or the back of the unit so that it can attach to the front or the back of the rack. To rack mount the unit do the following:

1. Screw the mounting brackets into the sides of the unit at the front or the rear, as shown in the diagram below.



2. Slide the unit into the rack and secure it to the rack.

Specifications

Function		CS-1708	CS-1716
Computer Connections		8	16
CPU Port Selection		Hotkeys; OSD	
LEDs	On Line	8 (Orange)	16 (Orange)
	Selected	8 (Green)	16 (Green)
	Power	1 (Blue)	
	Station ID	2 x 7 Segments	
Console Connectors	Keyboard	1 x USB Type A	
	Mouse	1 x USB Type A	
	Video	1 x HDB -15 female	
CPU Connectors		8 x SPDB - 15 female	16 x SPDB - 15 female
Daisy Chain Ports		1 x DB-25 male: 1 x DB-25 female	
Firmware Upgrade		1 x RJ-11 socket	
Power Consumption		DC 5V, 5.5W	DC 5V, 6W
Scan Interval		User Specified: 1 - 255 secs. (default 5 secs.)	
Resolution		Up to 2048 x 1536	
Operating Temperature		0 - 50^{o} C	
Storage Temperature		-20 - 60^{o} C	
Humidity		0 - 80% RH	
Housing		Metal	
Weight		2.7 kg	2.9 kg
Dimensions (L x W x H)		43.2 x 15.4 x 4.5cm	

OSD Factory Default Settings

The factory default settings are as follows:

Setting	Default
OSD Hotkey	[Scroll Lock] [Scroll Lock]
Port ID Display Position	Upper Right Corner
Port ID Display Duration	3 Seconds
Port ID Display Mode	The Port Number plus the Port Name
Scan Duration	5 Seconds
Scan/Skip Mode	All
Screen Blanker	0 (Disabled)
Logout Timeout	0 (Disabled)
Beeper	Y (Activated)
Accessible Ports	F (Full) For all Users on all Ports
Operating System	PC
Keyboard Language	Auto

Troubleshooting

Symptom	Possible Cause	Action
After installation, my Sun/Mac computer does not boot.	Operating System not properly set for its port.	When you install a Sun or Mac computer, before you run it for the first time you must set the correct operating system for the port it is connected to, otherwise, it will not boot. See *SET OPERATING SYSTEM*, p. 32, for details.
Keyboard and/or Mouse not responding.	Keyboard and/or mouse need to be reset.	Unplug the cable(s) from the console port(s), then plug it/them back in.
	No connection to the computer.	Check the cable from the switch to the computer to make sure it is properly connected.
	KVM switch needs to be reset.	Power off all devices on the installation (see the note at the top of p. 9); power off the KVM switch; wait five seconds; then power up.
Device not recognized message (Windows)	Windows timing problem.	1. Unplug the KVM cable from the computer's USB port. 2. Go into Windows' *System Settings* and remove the *Unknown Device* entry. 3. Plug the KVM cable back in. Windows will now recognize the device.

Limited Warranty

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